UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

WAPP TECH LIMITED PARTNERSHIP and WAPP TECH CORPORATION, *Plaintiffs* v. JPMORGAN CHASE BANK, N.A., *Defendant*	§ § § § § § § § §	CIVIL ACTION NO. 4:23-CV-1137 (Judge Mazzant)

CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

Before the Court is Plaintiffs WAPP Tech Limited Partnership and WAPP Tech Corporation's ("Plaintiff's" or "WAPP's") Opening Claim Construction Brief (Dkt. #64). Also before the Court is the Responsive Claim Construction Brief (Dkt. #66) filed by Defendant JPMorgan Chase Bank, N.A. ("Defendant" or "JPMC" or "Chase"), as well as Plaintiff's reply (Dkt. #71). Further before the Court are the parties' August 9, 2024 P.R. 4-3 Joint Claim Construction Statement (Dkt. #45), the parties' October 29, 2024 P.R. 4-5(d) Joint Claim Construction Chart (Dkt. #72, Ex. A), and Defendant's November 12, 2024 Supplemental Submission Regarding Claim Construction (Dkt. #77).

The Court held a claim construction hearing on November 8, 2024, to determine the proper construction of the disputed claim terms in United States Patents No. 8,924,192, 9,298,864, 9,971,678, 10,353,811, and 10,691,579 (collectively, the "patents-in-suit").

The Court issues this Claim Construction Memorandum Opinion and Order and hereby incorporates-by-reference the claim construction hearing transcript.

BACKGROUND

Plaintiff alleges infringement of United States Patents No. 8,924,192 (the "'192 Patent"), 9,298,864 (the "'864 Patent"), 9,971,678 (the "'678 Patent"), 10,353,811 (the "'811 Patent"), and 10,691,579 (the "'579 Patent").

The '192 Patent, titled "Systems Including Network Simulation for Mobile Application Development and Online Marketplaces for Mobile Application Distribution, Revenue Sharing, Content Distribution, or Combinations Thereof," issued on December 30, 2014, and bears an earliest priority date of June 10, 2005. The Abstract of the '192 Patent states:

> A system and methods emulate an application executing in real time in a mobile device. The mobile device is emulated in real time using a model running on a processor extrinsic to the mobile device. The model is based on characteristics indicative of performance of the mobile device. The application is executed in real time within the model and the application executing in the model is monitored to determine resource utilization information by the application for the mobile device. The resource utilization information for the mobile device is displayed.

Plaintiff submits:

> The patents-in-suit are all within the same patent family and relate back to U.S. Patent No 7,813,910 (which is not asserted in this case). The '192, '678, and '811 Patents are continuations of the '910 Patent and generally share the same specification. The '864 and '579 Patents are divisions of a continuation-in-part (U.S. Patent No. 8,589,140) of the '910 Patent. As such, they include essentially the same specification as the '192, '678, and '811 Patent continuations. The '678, '811, '864, and '579 Patents incorporate the '192 Patent specification. *See* '678 Patent at 1:8-18; '811 Patent at 1:7-19; '864 Patent at 1:7-14; '579 Patent at 1:7-16. Thus, the citations herein are typically to the '192 Patent specification for simplicity. (Dkt. #64, at p. 2).

The Court previously construed disputed terms in the '192 Patent, the '864 Patent, and the '678 Patent in *Wapp Tech Ltd. P'Ship, et al. v. Seattle Spinco et al.*, No. 4:18-CV-00469-ALM, Dkt. 176 (E.D. Tex. Apr. 27, 2020) (attached to Plaintiff's Opening Claim Construction Brief as Exhibit 6) ("*Micro Focus*").

The Court also previously construed disputed terms in the patents-in-suit in *Wapp Tech Ltd. P'Ship, et al. v. Wells Fargo & Co., et al.*, No. 4:21-CV-00671-ALM, Dkt. 96 (E.D. Tex. July 6, 2022) (attached to Plaintiff's Opening Claim Construction Brief as Exhibit 7) ("*Wells Fargo*," sometimes referred to by the parties as the "Bank Cases").

LEGAL STANDARDS

Claim construction is a matter of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). The purpose of claim construction is to resolve the meanings and technical scope of claim terms. *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). When the parties dispute the scope of a claim term, "it is the court's duty to resolve it." *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent's intrinsic evidence to define the patented invention's scope. *Id.* at 1313–14; *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification, and the prosecution history. *Phillips*, 415 F.3d at 1312–13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

Claim language guides the Court's construction of claim terms. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id.* Other claims, asserted and unasserted, can provide additional instruction because "terms are normally

used consistently throughout the patent." *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* at 1315 (quoting *Markman*, 52 F.3d at 979). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex. Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning than it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex*, 299 F.3d at 1325. For example, "[a] claim interpretation that excludes a preferred embodiment from the scope of the claim 'is rarely, if ever, correct.'" *Globetrotter Software, Inc. v. Elan Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics*, 90 F.3d at 1583). But, "[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims." *Constant*

v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1571 (Fed. Cir. 1988); *accord Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent."). The well-established doctrine of prosecution disclaimer "preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution." *Omega Eng'g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). "Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover." *Spectrum Int'l v. Sterilite Corp.*, 164 F.3d 1372, 1378–79 (Fed. Cir. 1988) (quotation omitted). "As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made during prosecution." *Omega Eng'g*, 334 F.3d at 1324. However, the prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002). Statements will constitute disclaimer of scope only if they are "clear and unmistakable statements of disavowal." *See Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1358 (Fed. Cir. 2003). An "ambiguous disavowal" will not suffice. *Schindler Elevator Corp. v. Otis Elevator Co.*, 593 F.3d 1275, 1285 (Fed. Cir. 2010) (citation omitted).

Although "less significant than the intrinsic record in determining the legally operative meaning of claim language," the Court may rely on extrinsic evidence to "shed useful light on the relevant art." *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises

may help the Court understand the underlying technology and the manner in which one skilled in

the art might use claim terms, but such sources may also provide overly broad definitions or may

not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may

aid the Court in determining the particular meaning of a term in the pertinent field, but "conclusory,

unsupported assertions by experts as to the definition of a claim term are not useful." *Id.*

Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in

determining how to read claim terms." *Id.*

The Supreme Court of the United States has "read [35 U.S.C.] § 112, ¶ 2 to require that a

patent's claims, viewed in light of the specification and prosecution history, inform those skilled

in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig

Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). "A determination of claim indefiniteness is a

legal conclusion that is drawn from the court's performance of its duty as the construer of patent

claims." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005)

(citations and internal quotation marks omitted), *abrogated on other grounds by Nautilus,* 134

S. Ct. 2120. "Indefiniteness must be proven by clear and convincing evidence." *Sonix Tech. Co.

v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

ANALYSIS

Agreed Claim Terms

In their August 9, 2024 P.R. 4-3 Joint Claim Construction Statement (Dkt. #45, at p. 2) and

in their October 29, 2024 P.R. 4-5(d) Joint Claim Construction Chart (Dkt. #72, Ex. A, at pp. 26–

35), the parties submitted the following agreed-upon constructions, which the Court hereby adopts

as agreed-upon:

Term	Agreed Construction
"simultaneously visually emulate, via one or more profile display windows" ('192 Patent, Claims 1, 60)	"emulate simultaneously, and display one or more windows showing resources of the mobile device that are available to the application"
"simultaneously visually simulate, via one or more profile display windows" ('678 Patent, Claim 1)	"simulate simultaneously, and display one or more windows showing resources of the mobile device that are available to the application"
"simulate, via one or more profile display windows" ('864 Patent, Claim 1)	"simulate, and display one or more windows showing resources of the mobile device that are available to the application"
"one or more profile display windows" ('192 Patent, Claims 1, 60; '864 Patent, Claim 1; '678 Patent, Claim 1)	"one or more windows showing resources of the mobile device that are available to the application"
"configured to" ('192 Patent, Claims 1–2, 12–13, 60, 65; '864 Patent, Claims 1, 8, 17; '678 Patent, Claims 1)	"actually programmed to"

Disputed Claim Terms

1. "simulate" and "emulate"

"simulate" ('192 Patent, Claims 1, 3, 12–13; '864 Patent, Claim 1; '678 Patent, Claims 1, 3, 12–13; '811 Patent, Claims 1, 8, 22, 24; '579 Patent, Claims 19–20, 33)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
"emulate"	"represent features of"; different than emulate

"emulate"
('192 Patent, Claims 1, 60; '811 Patent, Claim 26)

Plaintiffs' Proposed Construction	Defendant's Proposed Construction
Plain meaning	"model the hardware [of]"

(Dkt. #45, Ex. A, at pp. 2–3; *id.*, Ex. B, at p. 3 & 7; Dkt. #64, at p. 5; Dkt. #72, Ex. A, at pp. 1–7).

a. The Parties' Positions

Plaintiff argues that "'[s]imulate' and 'emulate' are interchangeable terms in the context of the patents-in-suit, and both terms should be given the same plain and ordinary meaning." (Dkt. #64, at p. 5). Plaintiff submits that this was the Court's finding in prior cases, and Plaintiff also argues that "Chase improperly asks the Court to limit the meanings of these terms to example embodiments, even though Chase does not allege disclaimer or express definition." (*Id.*, at pp. 5–6). Further, Plaintiff argues that Defendant's interpretation of these terms is inconsistent with how the terms are used in the claims. (*Id.*, at pp. 8–9).

Defendant responds that "Wapp violates basic claim-construction principles by treating the two different terms as having the same meaning without revealing what it contends that meaning to be." (Dkt. #66, at p. 2). Defendant also emphasizes that in Claim 26 of the '811 Patent, for example, the patentee used "emulate" and "simulate" within 20 words of each other, which Defendant argues weighs heavily against interpreting those terms as being interchangeable. (*Id.*, at pp. 2–3). Defendant further argues, as to Claims 9–11 of the '864 Patent, that "[t]he claims' explicit usage of two different terms—'simulate' and 'emulate'—with respect to two different objects—'real users' and 'real user behavior'—refutes Wapp's contention." (*Id.*, at p. 4.) Finally, Defendant argues that the use of different terms in different claims weighs against, not in favor of,

finding that the terms have the same meaning. (*Id.*, at p. 5) (citing *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012)).

As for the meaning of "emulate," Defendant argues that the claims consistently use "emulate" with reference to hardware characteristics. (*Id.*, at p. 6). Defendant also argues that "Wapp's own dictionary definitions make clear that 'emulate' involves modeling something deeper than the surface features of the target system, namely, the system's hardware." (*Id.*) (citation omitted). Defendant also notes prosecution history in which "issued claim 1 (numbered claim 44 during prosecution) originally recited 'emulate . . . a plurality of hardware characteristics,'" and "[a]fter the PTO's notice of allowance, the inventor amended the claim to recite 'emulate . . . a plurality of network characteristics.'" (*Id.*, at p. 7) (citations omitted). Defendant highlights that "Wapp previously told this Court [that] 'emulate' only remains in this claim due to an 'editing error.'" (*Id.*, at pp. 7–8).

As for the meaning of "simulate," Defendant argues that "the claims in the '192, '864, and '678 patents consistently use 'simulate' to refer to 'network characteristics,' ('864 patent, cl. 1; '678 patent, cl. 1), or 'a network connection state,' ('192 patent, cl. 1)." (*Id.*, at p. 8). Defendant also argues that "the specification describes using a 'simulator' to simulate network characteristics," and "contemporaneous technical dictionaries confirm JPMC's construction." (*Id.*) (citations omitted).

As to Plaintiff's remaining arguments, Defendant argues, for example, "that an emulator can 'simulate' does not mean that the verb 'emulate' and the verb 'simulate' are interchangeable." (*Id.*, at p. 9).

Plaintiff replies that "Chase asks the Court to reverse its previous correct constructions of these terms, but Chase brings nothing new to the table." (Dkt. #71, at p. 1). Plaintiff also reiterates

that "'[s]imulate' and 'emulate' are interchangeable throughout the intrinsic record . . ." and that "[i]f an emulator can include a simulator and a simulator can include an emulator, then these two concepts must be equivalent." (*Id.*, at pp. 1 & 2).

In a supplemental submission permitted by the Court, Defendant argues that the specification does not use "simulate" with reference to hardware but rather discloses a hardware emulator than can interact with a simulator, and "the emulator and the simulator remain separate components with separate functions." (Dkt. #77, at p. 2) (citing '192 Patent at 11:5–11). Defendant urges that "[o]nly after emulation occurs and the model is generated, can its *functionality* be simulated." (*Id.*)

b. Analysis

Defendant submits authority that "a patent's express purpose of the invention informs the proper construction." *Sequoia Tech., LLC v. Dell, Inc.*, 66 F.4th 1317, 1326 (Fed. Cir. 2023). The Background section of the patents-in-suit notes that different devices have different resources and, for example, "an application that plays correctly on the NOKIA 7610 may not play correctly on the NOKIA 6600 due to th[e] drop in inherent resources." '192 Patent at 1:49–51. The Court took this background context into account in *Micro Focus* and does so again here.

As to the present case, Claims 1 and 16 of the '192 Patent, for example, recite (emphasis added):

> 1. A system for developing an application for a mobile device comprising:
>   a software authoring interface configured to simultaneously visually *emulate*, via one or more profile display windows, a plurality of network characteristics indicative of performance of the mobile device when executing the application; wherein the software authoring interface is further configured to *simulate* a network connection state encountered by the mobile device.
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> * * *

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16. The system of claim 1, wherein the software authoring interface has access to real-time interaction with network operators to measure and *emulate* network characteristics.

As another example, Claim 26 of the '811 Patent recites (emphasis added):

26. The medium of claim 24, wherein the instructions *simulate* one or more network events that occur when interacting with a wireless network, wherein a user can create scripts to *emulate* actions of real user behavior to determine the performance of the application, or the network, or both.

In *Micro Focus*, Plaintiff proposed that no construction was necessary, and the defendants there proposed that "simulate" meant "imitate" (or, alternatively, "approximately represent") and that "emulate" meant "mimic" (or, alternatively, "precisely represent"). *Micro Focus* at 17. The Court found that "the patentee used the terms 'simulate' and 'emulate' interchangeably" and construed "simulate" to mean "emulate" and construed "emulate" to have its plain meaning. *Id.* at 25.

Although Defendant correctly argues that the Court's prior claim construction is not binding in the present case, Defendant does not persuasively justify departing from the analysis and constructions set forth therein. *See id.* at 21–25.

In reaching its conclusion in *Micro Focus*, the Court considered intrinsic evidence as well as extrinsic evidence. *See id.* at 19–25. The Court considered various authorities, such as that "the use of both terms in close proximity in the same claim gives rise to an inference that a different meaning should be assigned to each." *Bancorp Servs., LLC v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004). In the present case, Defendant likewise cites authority that using different terms in similar claims can weigh against finding interchangeability. *See Apple Inc. v. Omni MedSci, Inc.*, No. 2023-1034, 2024 WL 3084509, at *4 (Fed. Cir. June 21, 2024); *see also Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012) ("The fact

that the two adjacent claims use different terms in parallel settings supports the district court's

conclusion that the two terms were not meant to have the same meaning . . . .") (citation omitted).

The Court in *Micro Focus* also considered, however, that the inference "is not conclusive;

it is not unknown for different words to be used to express similar concepts, even though it may

be poor drafting practice." *Bancorp*, 359 F.3d at 1373; *see Power Mosfet Techs., L.L.C. v. Siemens

AG, 378 F.3d 1396, 1410 (Fed. Cir. 2004) ("[W]hile interpretations that render some portion of

the claim language superfluous are disfavored, where neither the plain meaning nor the patent

itself commands a difference in scope between two terms, they may be construed identically.")

Defendant cites prosecution history in which the patentee amended application claim 44 of

the '192 Patent (which issued as Claim 1 of the '192 Patent) so as to replace "emulate . . . a plurality

of hardware characteristics" with "emulate . . . a plurality of network characteristics." Defendant

emphasizes that Plaintiff stated in *Micro Focus* that this was an "editing error":

> Wapp agrees with Defendants that the use of "emulate" to refer to "network
> characteristics" in claim 1 of the '192 patent was an editing error during
> prosecution. . . . That claim should recite the term "simulate" to refer to "network
> characteristics." Whether the Court corrects the relevant language or finds that
> claim invalid for lack of written description, as Defendants have raised, is an issue
> for later adjudication.

(Dkt. #66, Ex. A, Pl.'s Suppl. Submission Regarding Claim Construction, at p. 3 n.1).

Defendant's reliance on Plaintiff's statement in *Micro Focus* is unpersuasive because the

Court disagreed with the parties; the Court instead construed "simulate" to mean "emulate" and

construed "emulate" to have its plain meaning. *See Micro Focus* at 19–25. Further, Plaintiff's

statement in *Micro Focus* regarding how the specification "generally" uses these terms does not

support any narrowing of the scope of either term. (Dkt. #66, Ex. A, Pl.'s Suppl. Submission

Regarding Claim Construction, at p. 3) ("As both parties have noted, the patent claims and

specification generally use the term 'emulate' to refer to a 'mobile device' and the term 'simulate'

to refer to 'network characteristics.'"). Also of note, in *Wells Fargo* the parties agreed to adopt the Court's *Micro Focus* construction by construing "simulate" and "simulating" as meaning "emulate" and "emulating," respectively, and by construing "emulate" to have its plain meaning. *Wells Fargo* at 8.

Plaintiff's discussion of Claims 9, 10, and 11 of the '864 Patent in the present case is further persuasive. Claim 9 of the '864 Patent recites "defining one or more virtual users to simulate real users." Claim 10, which depends from claim 9, recites "the one or more virtual users emulate actions of real user behavior." Claim 11, which depends from claim 10, also recites "emulate real user behavior." These claims thus use "simulate" and "emulate" interchangeably. Defendant's attempt to rebut this by distinguishing between "real users" and "real user behavior"—as to which Defendant's expert opines that "behavior" here refers to behavior of the hardware in response to user actions—is unpersuasive. (Dkt. #66, Ex. H, Aug. 9, 2024 van der Weide Decl. ¶¶ 96, 110–111).

Defendant does not otherwise persuasively support its assertion that "emulate" is limited to "hardware." Defendant emphasizes instances in which the specification uses "emulate" or "emulator" with reference to hardware characteristics, such as processor, storage, memory, or display. *See* '192 Patent at 5:49–54, 5:61–6:13 & 8:36. Defendant's argument is undercut by other disclosures, such as disclosure of "simulated functionality of model 102 (e.g., simulating additional handset functionality and/or network functionality)." *Id.* at 10:58–62. The opinions of Defendant's expert in this regard are unpersuasive. (*See* Dkt. #66, van der Weide Decl. at ¶ 107) ("[T]he capabilities of the mobile device emulator and the network simulator remain distinct: the emulator models hardware (of a mobile device), and the simulator represents features (of a network). At most, the emulator could also simulate (i.e., represent features of the mobile device

via emulation), but the simulator is never described to model hardware of any kind. In other words, the emulator can emulate and simulate, but the simulator can only simulate and cannot 'emulate.'").

At the November 8, 2024 claim construction hearing, the Court permitted Defendant to submit a short post-hearing brief to further respond to the Court's question at the hearing regarding whether any evidence suggests that the word "simulate" cannot be used in the context of hardware. Defendant frames its supplemental submission as being based on "the Court invited a supplemental response regarding evidence that the word 'simulate' does not refer to hardware." (Dkt. #77, at p. 1). Defendant concludes its submission by stating that "there is no disclosure within the Asserted Patents suggesting that the term 'simulate' is used in connection with mobile device hardware." (*Id.*, at p. 2). The Court believes that, more precisely, its inquiry was directed to whether any evidence *precludes* "simulate" from referring to hardware. In any event, although Defendant's supplemental submission ably cites distinctions in the specification between particular disclosed emulators and simulators (*see, e.g.*, '192 Patent at 10:17–23 & 11:5–11), Defendant still does not persuasively show any reason to preclude "simulate" from potentially relating to hardware.

Moreover, the *Modern Dictionary of Electronics* (7th ed. 1999) cited by Plaintiff in the present case, wherein the definition of "simulate" concludes with "*See* emulate," and vice versa, although insufficient by itself to find interchangeable usage in the patents-in-suit, is at least somewhat further persuasive. (Dkt. #64, Ex. 11 at 257, 697).

The dictionary definitions cited by Defendant are not inconsistent with finding that the patentee used "simulate" and "emulate" interchangeably. (*See* Dkt. #66, Ex. B, *The IBM Dictionary of Computing* 234, 626 (JPMC-00166573–74) (defining "emulate" as "[t]o imitate one

system with another, *primarily* by hardware, so that the imitating system accepts the same data, executes the same programs, and achieves the same results as the imitated system"; defining "simulate" as "[t]o imitate one system with another, *primarily* by software, so that the imitating system accepts the same data, executes the same computer programs, and achieves the same results as the imitated system") (emphasis added); *id.*, Ex. C, *IEEE Standard Dictionary of Electrical and Electronics Terms* 328, 902 (JPMC-0166581–82) (defining "emulation" as "[t]he imitation of all or part of one computer system by another, *primarily* by hardware, so that the imitating computer system accepts the same data, executes the same programs, and achieves the same results as the imitated system"; defining "simulation" as: "The representation of selected characteristics of the behavior of one physical or abstract system by another system. In a digital computer system, simulation is done by software, for example, (A) the representation of physical phenomena by means of operations performed by a computer system, (B) the representation of operations of a computer system by those of another computer system.") (emphasis added).

Also, although the *IBM Dictionary* notes that "simulate" "contrast[s] with emulate" (*id.*, Ex. B) (JPMC-00166574), relying on this distinction in a particular dictionary definition would be disfavored. *See Phillips*, 415 F.3d at 1322 ("[a] claim should not rise or fall based upon the preferences of a particular dictionary editor").

The Court therefore hereby construes these disputed terms as set forth in the following chart:

Term	Construction
"simulate"	**"emulate"**
"emulate"	**Plain meaning**

2. "application"

"application" ('192 Patent, Claims 1, 60–61, 65; '864 Patent, Claims 1, 8, 13; '678 Patent, Claims 1, 21; '811 Patent, Claims 1–2, 9, 22, 26; '579 Patent, Claims 15–16, 20)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
Plain meaning	"frame-based application"

(Dkt. #45, Ex. A, at p. 4; *id.*, Ex. B, at p. 12; Dkt. #64, at p. 11; Dkt. #72, Ex. A, at pp. 7–15).

a. The Parties' Positions

Plaintiff argues: "Chase improperly asks the Court to limit 'application' to example specification embodiments, without even alleging disclaimer or express definition, which would be required to deviate from the ordinary meaning. Contrary to Chase's position, the intrinsic evidence demonstrates the patentee used 'frame-based application' when he meant 'frame-based application,' and used the broader term 'application' when referring to applications in general." (Dkt. #64, at p. 11).

Defendant responds that "[f]rom start to finish, the asserted patents solely describe systems and methods concerning 'frame based applications.'" (Dkt. #66, at p. 10; *see id.*, at pp. 12–16). Defendant also argues that the specification refers to "frame based application 104" and "application 104" interchangeably. (*Id.*, at 11). Defendant urges that "the 'repeated description' of frame based applications, the 'repeated extolling of the virtues' of frame based applications, and the 'repeated criticisms' of non-frame based applications 'clearly point' to the conclusion that 'application,' as used in the asserted patents, means 'frame based application.'" (*Id.*, at p. 16) (citing *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 823–24 (Fed. Cir. 2016)).

Plaintiff replies that "Chase and its expert concede a POSITA in 2005 knew about both frame-based applications and non-frame-based applications and knew about tools for developing both frame-based and non-frame-based applications." (Dkt. #71, at p. 3) (citations omitted). Plaintiff also reiterates that not all of the embodiments are frame-based and, even if they were, Plaintiff argues, "this still would not meet the high standard for disavowal or express definition." (*Id.*, at p. 4) (citations omitted). Plaintiff analogizes, for example, that "[i]f I mention my blue pickup truck, then I later refer to it shorthand as a 'truck,' this does not imply the word 'truck' can only refer to blue pickup trucks." (*Id.*, at p. 5).

b. Analysis

Claim 31 of the '864 Patent recites "[a] method for emulating a *frame-based* application." This weighs against limiting the term "application" to being "frame-based" in the instances in which the claims do not specify "frame-based." *See Phillips*, 415 F.3d at 1314 ("Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.") (citation omitted).

Defendant's reliance on disclosures of "application 104" as being frame-based are unpersuasive because those disclosures refer to a particular embodiment. *See* '192 Patent at 4:53– 65, 4:66–5:4, 5:14–21, 7:12–14, 7:17–20 & 9:51–53. The *Ironworks* case cited by Defendant, wherein "[t]he specification refer[red] to 'camera unit 14' and its components as 'camera 14a,' 'optics 14b,' and 'image processing unit 14c,'" is not analogous. *Ironworks Patents LLC v. Samsung Elecs. Co.*, No. 2020-1191, 798 F. App'x 621, 625–26 (Fed. Cir. Feb. 21, 2020).

Also, the specification refers to Java, .NET, and BREW as examples of mobile application development platforms ('192 Patent at 3:40–47), and Plaintiff's expert persuasively submits that Java, .NET, and BREW can be used to develop applications that are not frame-based. (Dkt. #64,

Ex. 8, Aug. 9, 2024 Malek Decl. ¶ 151). The opinions of Defendant's expert, such as that the provisional patent application purportedly disparages Java, .NET, and BREW, are unpersuasive. (Dkt. #66, Ex. H, Aug. 9, 2024 van der Weide Decl. ¶ 145). In particular, the provisional application discussed by Defendant's expert refers to a feature that is absent in Java, .NET, and BREW, but this does not demonstrate that the patentee disparaged Java, .NET, or BREW or said anything to suggest that Java, .NET, and BREW were outside the scope of the term "application."

Finally, as to Defendant's argument that "the asserted patents never disclose mechanisms for profiling data or displaying resource utilization and availability that do not use a frame based application" (Dkt. #66, at p. 13) (citation omitted), this argument perhaps might bear upon issues of enablement or written description but does not warrant limiting the term "application" to the disclosed embodiments.

The *UltimatePointer* decision relied upon by Defendant does not compel any narrowing of "application." *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816 (Fed. Cir. 2016). In *UltimatePointer*, the Federal Circuit construed "handheld device" as being a "direct-pointing device" (as contrasted with an indirect pointing device that interacted with a sensor rather than with the screen), noting: "Taken together, the repeated description of the invention as a direct-pointing system, the repeated extolling of the virtues of direct pointing, and the repeated criticism of indirect pointing clearly point to the conclusion that the 'handheld device' in [the] claims . . . is limited to a direct-pointing device." *Id.* at 823.

In quoting *UltimatePointer*, Defendant conspicuously omits the phrase "[t]aken together" and omits the reference to "repeated criticism of indirect pointing." (Dkt. #66, at p. 15). In the present case, as noted above, Defendant does not demonstrate disparagement of non-frame-based applications. Defendant's reliance on *UltimatePointer* is unavailing.

Plaintiff also persuasively distinguishes the other authorities relied upon by Defendant because those cases involved definitions or disavowals rather than the question, as here, of whether the patentee consistently used a term to have a narrower meaning than it would otherwise have. *See Ironworks*, 798 F. App'x at 625 ("a camera unit as expressly defined in the specification includes a camera, optics, and an image processing unit"); *see also Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1334 (Fed. Cir. 2009) ("the specification defines 'malleable' to exclude any substantial resilience, and that definition overrides any ordinary meaning"); *Poly-Am L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1137 (Fed. Cir. 2016) ("the inventor intended to disavow any claim scope encompassing short seals that are not inwardly extended"); *Renishaw PLC v. Marposs Societa' per Azoni*, 158 F.3d 1243, 1249–52 (Fed. Cir. 1998) ("the definition selected by the patent applicant controls").

The Court therefore hereby expressly rejects Defendant's proposed construction, and no further construction is necessary.

The Court accordingly hereby construes **"application"** to have its **plain meaning**.

3. "system for [developing/testing] an application for a mobile device"

"system for testing an application for a mobile device" ('864 Patent, Claim 1; '678 Patent, Claim 1)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
The preamble is limiting; plain meaning	Not limiting
"system for developing an application for a mobile device" ('192 Patent, Cl. 1)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
The preamble is limiting; plain meaning	Not limiting

(Dkt. #45, Ex. A, at p. 1; *id.*, Ex. B, at p. 1; Dkt. #64, at p. 14; Dkt. #72, Ex. A, at pp. 22–24).

At the November 8, 2024 hearing, the parties rested on their briefing without oral argument as to these terms.

a. The Parties' Positions

Plaintiff argues that, in prior cases, the Court properly found that these preambles are limiting because they provide antecedent basis and recite essential structure. (Dkt. #64, at p. 15).

Defendant responds that Plaintiff fails to meet its burden to overcome the presumption that the preambles are not limiting. (Dkt. #66, at p. 17). Defendant argues that "courts routinely hold preambles are not limiting even when part of the preamble provides antecedent basis," and "[h]ere, nothing in the preamble language limits the configuration of the software." (*Id.*) (citations omitted). Defendant further argues that Plaintiff relies upon phrases that relate to intended use, not configuration, and "'[s]oftware,' by its very nature, is not structural." (*Id.*, at 18) (citation omitted).

Plaintiff replies that "these preambles recite specific structural relationships between the 'system,' 'testing/development,' the 'application,' and the 'mobile device' that are not repeated in the bodies of the claims." (Dkt. #71, at p. 6) (citation omitted). Plaintiff also reiterates that "these preambles are limiting because they provide antecedent basis for two claim terms." (*Id.*, at p. 7).

In their P.R. 4-5(d) Joint Claim Construction Chart, the parties noted that they "have agreed to rest on the briefs for this disputed term." (Dkt. #72, Ex. A, at p. 22).

b. Analysis

In general, a preamble limits the invention if it recites essential structure or steps, or if it is "necessary to give life, meaning, and vitality" to the claim. *Pitney Bowes*[, *Inc. v. Hewlett-Packard Co.*], 182 F.3d [1298,] 1305 [(Fed. Cir. 1999)]. Conversely, a preamble is not limiting "where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose

or intended use for the invention." *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002).

Claim 1 of the '192 Patent recites (emphasis added):

1. A *system for developing an application for a mobile device* comprising:
    a software authoring interface configured to simultaneously visually emulate, via one or more profile display windows, a plurality of network characteristics indicative of performance of the *mobile device* when executing the *application*;
    wherein the software authoring interface is further configured to simulate a network connection state encountered by the *mobile device*.

Claim 1 of the '864 Patent, for example, recites (emphasis added):

1. A *system for testing an application for a mobile device* comprising:
    software configured to simulate, via one or more profile display windows, a plurality of network characteristics indicative of performance of *the mobile device* when executing *the application*; wherein the network characteristics are based on data of interaction with networks in non-simulated environments.

In *Micro Focus*, the Court cited authority regarding preambles providing antecedent basis,

and the Court found that these preambles are limiting. *See Micro Focus* at 11–13 (citing *Eaton*

Corp. v. Rockwell Int'l Corp., 323 F.3d 1332, 1339 (Fed. Cir. 2003) ("When limitations in the

body of the claim rely upon and derive antecedent basis from the preamble, then the preamble may

act as a necessary component of the claimed invention.")). In *Wells Fargo*, the parties agreed that

these preambles are limiting. *Wells Fargo* at 8.

The Court reaches the same conclusion again here. The "developing" and "testing" are not

"independent" parts of these preambles and are not "merely duplicative of limitations in the body

of the claim." *TomTom, Inc. v. Adolph*, 790 F.3d 1315, 1323–24 (Fed. Cir. 2015); *cf. Proveris*

Scientific Corp. v. Innovasystems, Inc., 739 F.3d 1367, 1373 (Fed. Cir. 2014) ("The phrase 'the

image data' clearly derives antecedent basis from the 'image data' that is defined in greater detail

in the preamble as being 'representative of at least one sequential set of images of a spray

plume.'"). Further, these preambles "serve[] to focus the reader on the invention that is being claimed" and "state[] the framework of the invention." *On Demand Mach. Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1343 (Fed. Cir. 2006).

The Court therefore hereby finds that **the preambles of Claim 1 of the '864 Patent, Claim 1 of the '678 Patent, and Claim 1 of the '192 Patent are limiting and have their plain meaning.**

4. "the connection simulation"

"the connection simulation" ('192 Patent, Claim 4)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
Plain meaning	Indefinite

(Dkt. #45, Ex. A, at p. 5; *id.*, Ex. B, at p. 14; Dkt. #64, at p. 17; Dkt. #72, Ex. A, at pp. 20–22).

a. The Parties' Positions

Plaintiff argues that "Claim 2's initial reference to 'one or more connection simulations' carries either a singular or plural meaning, and subsequent use of the definite article 'the' to refer back to it simply reinvokes that same 'one or more' meaning." (Dkt. #64, at p. 18) (citing *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008)).

Defendant responds that "'the connection simulation' in claim 4 lacks any explicit antecedent basis because claim 2 recites a generic set of 'one or more connection simulations.'" (Dkt. #66, at p. 29). Defendant also argues that "[t]he inventor's explicit use of the language 'one or more connection simulations' in claims 8 and 9 confirms that claim 4, which does not employ such language, cannot limit the 'one or more connection simulations' collectively." (*Id.*) (citation omitted).

Plaintiff replies that "'[t]he connection simulation' reinvokes the plural 'one or more' meaning of its antecedent basis—the 'one or more connection simulations' in claim 2." (Dkt. #71, at p. 7) (citation omitted).

b. Analysis

Claims 2 and 4 of the '192 Patent recite (emphasis added)

2. The system of claim 1, wherein the software authoring interface is configured to enable a user to select from *one or more connection simulations* for testing how well mobile content performs on the mobile device.

* * *

4. The system of claim 2, wherein *the connection simulation* includes one or more profiles.

The recital of "one or more connection simulations" is, in patent parlance, equivalent to reciting "a connection simulation," and the Federal Circuit has established that a subsequent use of the definite article, "the," as in "*the* connection simulation," invokes the same "one or more" meaning. *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008) ("Because the initial indefinite article ('a') carries either a singular or plural meaning, any later reference to that same claim element merely reflects the same potential plurality."). Also, the recital of a user "select[ion] in Claim 2 does not give rise to any indefiniteness at least because Claim 4 refers generally to "the connection simulation," not necessarily a selected connection simulation. Defendant's reliance on the recital of "the one or more connection simulations" in Claims 8 and 9 (which depend from Claim 2) is unpersuasive and tends to reinforce, rather than rebut, the reasonable clarity of Claim 4. The patentee simply used more than one permissible way to refer back to the recital of "one or more connection simulations" recited in Claim 2.

The Court therefore hereby expressly rejects Defendant's indefiniteness argument and finds that **the antecedent basis for "the connection simulation" in Claim 4 of the '192 Patent is the recital of "one or more connection simulations" in Claim 2 of the '192 Patent**.

5. "the monitored resource"

"the monitored resource" (’579 Patent, Claims 15, 27)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
Plain meaning	Indefinite

(Dkt. #45, Ex. A, at p. 8; *id.*, Ex. B, at p. 25; Dkt. #64, at p. 18; Dkt. #72, Ex. A, at p. 24).

At the November 8, 2024 hearing, the parties rested on their briefing without oral argument as to this term.

a. The Parties' Positions

Plaintiff argues that Defendant's argument regarding purported lack of antecedent basis "does not make sense because 'the monitored resource' can refer to a plurality of resources; it means 'the one or more monitored resources' and it refers back to the 'one or more resources' whose utilization is being monitored." (Dkt. #64, at p. 19) (citing *Baldwin*, 512 F.3d at 1342). Moreover, Plaintiff agues, "[t]he specification provides multiple examples of monitoring resources and displaying them." (*Id.*, at p. 19).

Defendant responds that "Claim 15 recites 'display a representation of one or more of the monitored resources,' but the claim does not recite a monitored resource from which 'the monitored resource' could reasonably depend." (Dkt. #66, at p. 30). Defendant also argues that "[t]here is no indication anywhere in the specification which 'resource' is 'the monitored resource' recited in claim 15." (*Id.*).

Plaintiff replies that "'[t]he monitored resource' reinvokes the plural 'one or more' meaning of its antecedent basis, *i.e.*, the 'one or more resources' whose utilization is being monitored." (Dkt. #71, at p. 7) (citation omitted).

In their P.R. 4-5(d) Joint Claim Construction Chart, the parties noted that they "have agreed to rest on the briefs for this disputed term." (Dkt. #72, Ex. A, at p. 22).

b. Analysis

The analysis for this term is essentially the same as for "the connection simulation" in Claim 4 of the '192 Patent, discussed above. The recital of "display a representation of one or more of *the monitored resource*" in Claims 15 and 27 of the '579 Patent refers back to "*monitor utilization of one or more resources* of the mobile device over time by an application running on a simulation of the mobile device." To whatever extent this antecedent basis is deemed to be not explicit, this antecedent basis relationship is implicit because monitoring utilization of one or more resources gives rise to one or more monitored resources, and "the monitored resource" encompasses both the singular and the plural. *See Baldwin*, 512 F.3d at 1342 (quoted above); *see also Energizer Holdings, Inc. v. Int'l Trade Comm'n*, 435 F.3d 1366, 1371 (Fed. Cir. 2006) (holding that "an anode gel comprised of zinc as the active anode component" provided implicit antecedent basis for "said zinc anode"); *see also Ex Parte Porter*, 25 U.S.P.Q. 2d (BNA) 1144, 1145 (B.P.A.I. 1992) ("The term 'the controlled fluid' . . . finds reasonable antecedent basis in the previously recited 'controlled stream of fluid . . . .'"); *Fisher-Price, Inc. v. Graco Children's Prods.*, No. 05-1258, 154 F. App'x 903, 909 (Fed. Cir. Nov. 4, 2005) ("[a] claim is not invalid for indefiniteness if its antecedent basis is present by implication") (citations omitted).

Finally, to the extent Defendant argues that this term lacks support in the specification, Defendant's argument perhaps might pertain to the requirements of written description and enablement but does not raise any issue of indefiniteness.

The Court therefore hereby expressly rejects Defendant's indefiniteness argument and finds that **the antecedent basis for "the monitored resource" is the recital of "monitor utilization of one or more resources."**

6. "network characteristics indicative of performance of the mobile device [when executing the application]" and "operator network characteristics including at least bandwidth availability indicative of performance of the mobile device when executing the application"

"network characteristics indicative of performance of the mobile device [when executing the application]" ('192 Patent, Claim 1; '864 Patent, Claim 1)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
Plain meaning	Indefinite
"operator network characteristics including at least bandwidth availability indicative of performance of the mobile device when executing the application" ('678 Patent, Claim 1)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
Plain meaning	Indefinite

(Dkt. #45, Ex. A, at pp. 5–6; *id.*, Ex. B, at pp. 16 & 18–19; Dkt. #64, at p. 21; Dkt. #72, Ex. A, at pp. 15–17).

a. The Parties' Positions

Plaintiff argues that "[a] POSITA would readily understand these terms, and Chase's artificial confusion is the result of its nonsensically narrow interpretation of the claims." (Dkt. #64, at p. 21). Plaintiff submits that "[b]oth the specification and the claims give specific examples

(*e.g.*, bandwidth availability and receiving a message) of 'network characteristics indicative of performance of the mobile device,' demonstrating a POSITA would readily understand the meaning of this phase." (*Id.*, at p. 23).

Defendant responds that "[s]killed artisans would not understand how 'network characteristics' could indicate performance of a mobile device because 'network characteristics' are not related to mobile devices," and "[t]he specification nowhere describes mobile devices as having 'network characteristics.'" (Dkt. #66, at pp. 25 & 26) (citations omitted).

Plaintiff replies that "[a]nyone who has ever used a mobile phone knows how network characteristics relate to mobile device performance—mobile device applications tend to perform badly on slow networks and well on fast networks, for example." (Dkt. #71, at pp. 7–8) (citation omitted). Plaintiff further argues:

> Chase insinuates this claim limitation is an error because it "arises from an amendment made during prosecution of the '192 patent." Resp. at 25. But the patentee deliberately repeated the same "network characteristics indicative of performance of the mobile device" language in the subsequent claims of the '864 and '678 Patents. This repeated and deliberate claim language is not an error, and it is amply supported by the specification. Br. at 23.

(Dkt. #71, at p. 8).

b. Analysis

Claim 1 of the '192 Patent, for example, recites (emphasis added):

> 1. A system for developing an application for a mobile device comprising:
>   a software authoring interface configured to simultaneously visually emulate, via one or more profile display windows, a plurality of *network characteristics indicative of performance of the mobile device when executing the application*; wherein the software authoring interface is further configured to simulate a network connection state encountered by the mobile device.

In *Wells Fargo*, the Court construed various "network characteristics" and "indicative of" terms in several claims, including the claims here at issue in the present case, to have their plain meaning. *Wells Fargo* at 11–37.

Defendant emphasizes that during prosecution of the '192 Patent, after allowance, the patentee amended Claim 1 of the '192 Patent from reciting "a plurality of hardware characteristics indicative of performance of the mobile device" to reciting "a plurality of network characteristics indicative of performance of the mobile device." Ex. D at 8. Yet, the patentee repeated this "network characteristics" language in the claims of the '864 Patent and the '678 Patent, which undercuts Defendant's suggestion that the language at issue was a mistake.

Further, "indicative of" has a broad plain meaning and can be reasonably read as encompassing various correlations between network characteristics and mobile device performance, such as relatively high network bandwidth resulting in relatively fast device performance and relatively low network bandwidth resulting in relatively slow device performance. The opinion of Plaintiff's expert is further persuasive in this regard. (Dkt. #64, Ex. 8, Aug. 9, 2024 Malek Decl. ¶ 109). The opinions of Defendant's expert to the contrary are unpersuasive. (*See* Dkt. #66, Ex. H, Aug. 9, 2024 van der Weide Decl. ¶¶ 147–165). Defendant's reliance on authority that the "claims are nonsensical in the way a claim to extracting orange juice from apples would be, and are thus indefinite," is unavailing. *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1367 (Fed. Cir. 2016).

The Court therefore hereby expressly rejects Defendant's indefiniteness argument. Defendant presents no alternative proposed construction, and no further construction is necessary.

The Court accordingly hereby construes these disputed terms as set forth in the following chart:

Term	Construction
"network characteristics indicative of performance of the mobile device [when executing the application]" ('192 Patent, Claim 1; '864 Patent, Claim 1)	**Plain meaning**
"operator network characteristics including at least bandwidth availability indicative of performance of the mobile device when executing the application" ('678 Patent, Claim 1)	**Plain meaning**

7. "on the mobile device"

"on the mobile device" ('192 Patent, Claim 60)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
Plain meaning	Indefinite

(Dkt. #45, Ex. A, at p. 7; *id.*, Ex. B, at p. 21; Dkt. #64, at p. 24; Dkt. #72, Ex. A, at p. 20).

a. The Parties' Positions

Whereas "Chase argues indefiniteness because the first use of 'the mobile device' is preceded by the word 'the' instead of 'a,'" Plaintiff argues that "whether the term uses 'a' or 'the' is of no import here because its meaning is unambiguous in light of the claim language and specification." (Dkt. #64, at p. 24) (citations omitted). Plaintiff urges that "[a]s in [*In re*] *Downing*[, 754 F. App'x 988, 996 (Fed. Cir. 2018)], there is only one mobile device this claim is talking about—the mobile device executing the application." (Dkt. #64, at p. 24). Plaintiff also argues that the specification supports this understanding. (*Id.*, at 25.) "In the alternative," Plaintiff argues, "this claim is not indefinite because the Court can correct 'on *the* mobile device' to 'on *a* mobile device' as an obvious minor typographical error." (*Id.*, at 26.)

Defendant responds that "the claim fails to supply any antecedent basis for 'on the mobile device,'" and "[f]rom the plain language, it is then unclear if the phrase 'on the mobile device' limits 'a system,' or 'an application,' or 'a user,' or 'a photo,' or 'to modify.'" (Dkt. #66, at p. 23). Defendant argues that this is "not a minor typographical mistake or clerical error" and therefore Plaintiff cannot seek a judicial correction. (*Id.*, at p. 25).

Plaintiff replies:

> Chase's feigned confusion is premised entirely on the fact that "mobile device" is preceded by the article "the." A claim does not need to be optimally drafted to be definite; it just needs to provide "reasonable certainty." There is only one valid interpretation of this claim, and Chase does not propose any alternative interpretation: "the first instance of 'the mobile device' provides antecedent basis for the second instance." Malek Dec. ¶133. Chase does not dispute that this is the only way to interpret the claim—it is therefore reasonably certain and not indefinite.

(Dkt. #71, at p. 8). Alternatively, Plaintiff argues that judicial correction is appropriate because the correction is not subject to reasonable debate and because the prosecution history does not suggest a different interpretation. (*Id.*, at p. 9).

b. Analysis

Claim 60 of the '192 Patent recites (emphasis added):

> 60. A system comprising:
> an application configured to enable a user to modify a photo *on the mobile device*, wherein the application is developed using a software authoring platform configured to simultaneously visually emulate, via one or more profile display windows, a plurality of hardware characteristics indicative of performance of *the mobile device* when executing the application.

The specification discloses, for example:

> In one embodiment, a method emulates and profiles an application to play on a mobile device that includes a Flash Player. Characteristics defining performance of the mobile device are loaded. The mobile device is emulated using a model based upon the characteristics.

'192 Patent at 2:13–17.

The *Downing* and *Lite-Netics* cases cited by Plaintiff are analogous. *See In re Downing*, 754 F. App'x 988, 996 (Fed. Cir. 2018) ("a claim term that lacks an antecedent basis may, but does not necessarily, render a claim indefinite"; "[C]laim 1's recitation of one end user could only refer to the end user using the product. Who else could the end user be? We therefore agree with Downing that the claims are not indefinite for lacking an antecedent basis for 'the end user'") (citation omitted); *see also Lite-Netics v. Nu Tsai Capital*, No. 8:22-CV-314, 2024 WL 4136271, at *32–*33 (D. Neb. Sept. 10, 2024) ("dependent claim 5 introduces the term 'the wire clamp' without antecedent basis," but "the context provided by the specification makes plain what 'the wire clamp' is, despite the absence of that claim term from independent claim 1 from which claim 5 depends").

Here, "an application configured to enable a user to modify a photo on the mobile device" is reasonably clear as referring to the mobile device that the user is using. Defendant's suggestion that "it is . . . unclear if the phrase 'on the mobile device' limits 'a system,' or 'an application,' or 'a user,' or 'a photo,' or 'to modify'" is unpersuasive. (Dkt. #66, at p. 23).

Defendant's reliance on a purported absence of any disclosure in the specification regarding a photo editing application for a mobile device appears to be incorrect (*see* '192 Patent at 8:5–14) ("image manipulation"), but in any event Defendant's argument is unpersuasive because the claim language is reasonably clear on its face.

The Court therefore hereby expressly rejects Defendant's indefiniteness argument. Defendant presents no alternative proposed construction, and no further construction is necessary.

The Court accordingly hereby construes **"on the mobile device"** to have its **plain meaning**.

8. "select one or more characteristics associated with a mobile device"

"select one or more characteristics associated with a mobile device" ('579 Patent, Claim 15)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
Plain meaning	Indefinite

(Dkt. #45, Ex. A, at p. 7; *id.*, Ex. B, at p. 23; Dkt. #64, at p. 26; Dkt. #72, Ex. A, at pp. 17–18).

a. The Parties' Positions

Plaintiff argues that, whereas the Court previously found Claim 1 of the '579 Patent indefinite, "the Court' prior holding was based on the fact that '579 [C]laim 1 *does not* recite selecting any characteristics, but '579 Claim 15 *does* explicitly recite "select one or more characteristics" and also makes clear *which* characteristics are selected, namely, "one or more characteristics associated with a mobile device." (Dkt. #64, at p. 28).

Defendant argues that this phrase is indefinite because "it is not reasonably clear to skilled artisans what characteristics or combinations of characteristics (if any) can be selected." (Dkt. #66, at p. 19). Defendant submits that whereas "Wapp explicitly cites to an embodiment where a *user selects a mobile device* and asks the Court to *infer that this represents selecting characteristics associated with that device*," "[t]his is the same inference the Court previously rejected" in prior cases. (*Id.*) (citations omitted). Defendant urges that "[s]electing characteristics is not the same as selecting mobile device type." (*Id.*).

Plaintiff replies by reiterating its opening arguments. (*See* Dkt. #71, at p. 9). Plaintiff also argues that Defendant's argument regarding lack of support in the specification "is a red herring that goes to enablement or written description, not indefiniteness," and "[r]egardless, the specification amply supports this term." (*Id.*, at pp. 9–10) (citation omitted). Plaintiff also submits

that "the first instance of 'a mobile device' appears in the preamble, which is not limiting (and

Chase does not argue it is)." (*Id.*, at p. 10).

b. Analysis

In *Wells Fargo*, the Court found that Claim 1 of the '579 Patent (which is not asserted in

the present case) was indefinite because "the selected characteristics" lacked antecedent basis,

finding that the claim was "unclear as to which characteristics are selected." *Wells Fargo* at 37–

42; *see id.* at 40 ("the 'simulate …' limitation refers to the 'mobile device type' (rather than the

'characteristics') as being 'selected'").

Claim 15 of the '579 Patent, by contrast, expressly recites selecting characteristics

(emphasis added):

> 15. A non-transitory, computer-readable medium comprising software instructions
> for developing an application to be run on a mobile device, wherein the software
> instructions, when executed, cause a computer to:
>   *select one or more characteristics associated with a mobile device*;
>   monitor utilization of one or more resources of the mobile device over time
> by an application running on a simulation of the mobile device;
>   display a representation of one or more of the monitored resource;
>   correspond the utilization of a specific displayed resource at a given time
> with one or more functions, or code, or both of the application responsible for that
> utilization;
>   initiate transmission of the application on a simulation of the mobile device,
> or to the physical mobile device, or both.

The specification provides examples of "Mobile Device Characteristics" in Table 1, which

is reproduced here:

TABLE 1

Mobile Device Characteristics	
Parameter	Value
Name	NOKIA 3650
Processor	ARM 4T
Processor Speed	104 MHz
Storage Access Speed	5.88 files/second
RAM Size	256 MB
Storage Size	512 MB
Display Width	256
Display Height	394
Pixel Depth	24
Processor Availability	60%
RAM Availability	60%
Storage Availability	40%

See '192 Patent at 6:11–13 ("Table 1 Mobile Device Characteristics shows exemplary characteristics that may be used to specify performance of model 102 to emulate mobile device 114."); *see also id.* at 6:13–47 (discussing Table 1). Defendant's argument that the specification "only supports selecting a mobile device with associated characteristics," even if accepted as true, is unpersuasive because the claim language at issue is sufficiently clear on its face. The opinions of Defendant's expert in this regard are likewise unpersuasive. (*See* Dkt. #66, Ex. H, Aug. 9, 2024 van der Weide Decl. at ¶ 190).

The Court therefore hereby expressly rejects Defendant's indefiniteness argument. Defendant presents no alternative proposed construction, and no further construction is necessary.

The Court accordingly hereby construes **"select one or more characteristics associated with a mobile device"** to have its **plain meaning**.

9. "the physical mobile device"

"the physical mobile device" ('579 Patent, Claims 15–16)	
Plaintiffs' Proposed Construction	**Defendant's Proposed Construction**
Plain meaning	Indefinite

(Dkt. #45, Ex. A, at p. 8; *id.*, Ex. B, at p. 26; Dkt. #64, at p. 28; Dkt. #72, Ex. A, at pp. 18–20).

a. The Parties' Positions

Plaintiff argues that the meaning of this claim language is reasonably clear because "all instances of 'a mobile device' refer to the same physical mobile device—the device whose characteristics are being selected is the same device that is being simulated," and "[s]ubsequent references to 'a simulation of the mobile device' refer to a computer simulation of that physical mobile device." (Dkt. #64, at p. 29).

Defendant responds that "Claim 15 is indefinite because it recites different types of mobile devices but provides no antecedent basis for the claimed '*the* physical mobile device.'" (Dkt. #66, at p. 20; *see id.*, at pp. 20–23).

Plaintiff replies that "Claim 15 uses the word 'physical' to emphasize that this mobile device is real rather than simulated," and "[t]he claim's prior recitation of 'a mobile device' refers to the same physical device." (Dkt. #71, at p. 10).

b. Analysis

Claim 15 of the '579 Patent, by contrast, expressly recites selecting characteristics (emphasis added):

> 15. A non-transitory, computer-readable medium comprising software instructions
> for developing an application to be run on a mobile device, wherein the software
> instructions, when executed, cause a computer to:
>   select one or more characteristics associated with *a mobile device*;

monitor utilization of one or more resources of *the mobile device* over time by an application running on *a simulation of the mobile device*;

display a representation of one or more of the monitored resource;

correspond the utilization of a specific displayed resource at a given time with one or more functions, or code, or both of the application responsible for that utilization;

initiate transmission of the application on a *simulation of the mobile device*, or to *the physical mobile device*, or both.

Although "the physical mobile device" lacks explicit antecedent basis, the recital of "a mobile device," as contrasted with the recital of "a simulation of the mobile device," provides reasonably clear implicit antecedent basis. *See, e.g., Energizer*, 435 F.3d at 1371; *Ex Parte Porter*, 25 U.S.P.Q. 2d at 1145; *Fisher-Price*, 154 F. App'x at 909. The opinion of Plaintiff's expert is further persuasive in this regard. (Dkt. #64, Aug. 9, 2024 Malek Decl. ¶¶ 170–171) ("a POSITA would recognize that a mobile device refers to a physical object"; "[a] POSITA would understand that a 'simulation of the mobile device' is different than 'a mobile device'"). This is also consistent with disclosures in the specification that use the phrase "mobile device" to refer to a physical device. *See, e.g.,* '192 Patent at 1:24–27 ("It is estimated that nearly 700 million new mobile devices will be shipped in 2005, with a new handset model being launched every other day.")

This understanding does not amount to "rewriting the claims," as Defendant argues. *Synchronoss Tech., Inc. v. Dropbox, Inc.*, 987 F.3d 1358, 1367 (Fed. Cir. 2021). Rather, this understanding is apparent on the face of the claim, which is reinforced by the specification as noted above. Also, disclosure regarding characteristics for "each mobile device *type*" ('192 Patent at 6:41–42), cited by Defendant, likewise is not inconsistent with understanding the recital of "a mobile device" in this claim as referring to a physical device.

Further, Defendant notes that the claim previously recited "one or more physical versions of the mobile device" instead of "the physical mobile device" (Dkt. #66, Ex. F, Nov. 18, 2019 Amendment and Response to Non-Final Office Action at 4 (JPMC-00006142)), but this

prosecution history does not undermine the readily understandable meaning that is evident on the face of the issued claim, as discussed above.

Finally, the recital of "developing an application to run on a mobile device," in the preamble, does not give rise to any uncertainty. Plaintiff argues that the preamble of this claim is not limiting, and Defendant's claim construction brief does not suggest otherwise. The antecedent basis is the recital of "a mobile device" in the body of the claim. Alternatively, even if the preamble were found to be limiting, a plain reading of the claim is that these two instances of "a mobile device" are coextensive.

The Court therefore hereby expressly rejects Defendant's indefiniteness argument and finds that **the antecedent basis for "the physical mobile device" is the recital of "a mobile device" in the first limitation of the body of Claim 15 of the '579 Patent.**

CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 19th day of November, 2024.

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AMOS L. MAZZANT
UNITED STATES DISTRICT JUDGE